It was, on motion,

RESOLVED that the sum of Fourteen thousand dollars (\$14,000), RF 57143

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or as much thereof as may be necessary, be, and it hereby is, appropriated to the UNIVERSITY OF WISCONSIN for research in genetics under the direction of Professor Joshua Lederberg, during the two-year period beginning September 1, 1957.

The following considerations were presented:

Biological and Medical Research: Biology - genetics

Previous Interest: Funds totaling \$40,500, including an appropriation which expires on August 31, 1957, have provided continuous support for Dr. Lederberg's work since 1948. An appropriation of \$25,000 over a three-year period toward the development of a program in medical genetics in the Medical School of the University of Wisconsin will terminate on June 30, 1959.

General Description: When Dr. Lederberg first received Foundation support nine years ago, he was only 23 years old, and was commonly regarded as a very promising but rather brash and agressive upstart in the genetic field. Nevertheless, he already had made important scientific contributions, in particular through demonstrating bacterial "sexuality" or a passing of genetic material from one bacterial partner to another. This pioneer work opened up entirely new avenues for genetic research. During subsequent years, Dr. Lederberg has matured into one of the real leaders in the science of genetics and his laboratory has become an important training center in this field. His research has in the main been related to his original observation on genetic transfer in bacteria, but has had important ramifications into areas such as the

genetic nature of viruses, the transmission of the genetic traits of one bacterial strain to another through infection with a bacterial virus, immunogenetics of bacteria, the relationship of enzymatic activity to genetic composition, the origin of drug resistance, and the mechanisms of antibiotic action.

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(Continued)

A young scientist of Dr. Lederberg's stature would inevitably have attractive offers from elsewhere but he has recently accepted an affiliation with the University of Wisconsin School of Medicine as Professor and Chairman of a new Department of Medical Genetics. This will be a dual appointment between the School of Agriculture, with which Dr. Lederberg has been associated in the past, and the Medical School. He will have associated with him Assistant Professor Newton E. Morton, who has been developing medical genetics in the Medical School and toward whose program the Foundation is contributing. It will take some time for plans and policies regarding the new department to materialize, to construct new quarters, and to provide other facilities. While Dr. Lederberg can and does attract sizeable research funds from other sources, it would be unfortunate if his research were abruptly and adversely affected by withdrawal of the important and unusually flexible support which is now provided by the Foundation. The proposed two-year grant would permit him to continue his exceptionally productive investigations during a transition period when long-term plans for the development of medical genetics are being consolidated.

<u>Finances</u>: Assistance in the amount of \$14,000 over a two-year period is recommended, this sum to be available for employment of personnel, for equipment and supplies, and for general research expenses.

<u>Future Implications</u>: In view of The Rockefeller Foundation's interest in genetics, the quality of staff at Wisconsin, and the promising new programs in the medical aspects of this field which they are developing, the officers may wish to recommend further assistance.